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October 7, 2009 277085.31.LC/MIPC.C987 155 Grand Avenue, Suite 1000 Oakland, CA 94612 P.O. Box 12681 Oakland, CA 94604-2681 Tel 510.251.2426 Fax 510.622.9000

CH2M HILL

Ms. Carolyn d'Almeida United States Environmental Protection Agency 75 Hawthorne Street, SFD-7-2 San Francisco, CA 94105

Subject: Polychlorinated Biphenyl Site Building 688 UL#02 in Investigation Area C2,

Where No Further Action is Required under the United States Environmental

Protection Agency Consent Agreement and Final Order

Dear Ms. d'Almeida:

CH2M HILL prepared this letter to comply with the Consent Agreement and Final Order (CA/FO) between United States Environmental Protection Agency (USEPA) and the United States Department of the Navy (Navy), with the City of Vallejo and Lennar Mare Island, LLC (LMI), as intervenors (USEPA et al. 2001). The CA/FO sets forth the polychlorinated biphenyl (PCB)-related requirements that must be met to satisfy the Toxic Substances Control Act (TSCA) for LMI's Eastern Early Transfer Parcel.

Pursuant to Paragraph 6(a) of the CA/FO, this letter demonstrates that a no further action (NFA) determination under TSCA is appropriate, with respect to PCB contamination, as part of the overall regulatory closure process for PCB Site Building 688 UL#02, on LMI's Eastern Early Transfer Parcel. An NFA determination is appropriate because the Navy performed cleanup actions prior to August 28, 1998, and the remaining PCB concentrations – a maximum total PCB concentration less than 10 milligrams per kilogram (mg/kg) and an average PCB concentration less than 5 mg/kg – are less than the alternative substantive cleanup requirements (SCRs). In accordance with Paragraphs 7 and 8 of the CA/FO, NFA is appropriate for PCB Site Building 688 UL#02, with a land use covenant limiting the property to industrial use.

Site Identification

Using visual site surveys, reviews of historical records, building closure reports, and databases of electrical equipment, the Navy identified sites where PCB-containing equipment was located, PCB spills were documented, or contamination was suspected because of building history or visible stains (Tetra Tech Environmental Management, Inc. 1999). Navy personnel from Supervisor of Shipbuilding, Conversion and Repair, Portsmouth, Virginia, Environmental Detachment (SSPORTS) conducted interim PCB assessments and performed cleanup actions (e.g., washing, scabbling) in accordance with technical work documents (TWDs), where necessary.

Building 688, a pump test shop built in 1941, is located east of Railroad Avenue and south of Oklahoma Street (formerly 13th Street) in Investigation Area C2. Building 688 is currently occupied and used for material storage. According to the *Preliminary Land Use Plan* (SWA Group 2000), Building 688 is in an area designated for future industrial use. Figure 1 shows the location of Building 688.

There are three previously unidentified PCB sites associated with Building 688 that were not listed in the Consent Agreement signed April 16, 2001, by LMI, the City of Vallejo, and the State of California Environmental Protection Agency, Department of Toxic Substances Control (LMI et al. 2001): UL#01, UL#02, and UL#03. PCB Site Building 688 UL#02 is defined as the building floor stains in the northern, southeastern, and central interior of Building 688. PCB Site Building 688 UL#01 consists of concrete, manholes, soil, and asphalt associated with a transformer pad adjacent to the western exterior wall of Building 688 and is being addressed for closure in a separate submittal. PCB Site Building 688 UL#03 consists of loose sediment and debris inside covered and steel-lined pits beneath the floor of Building 688 and is being addressed for closure in a separate submittal (Figure 1).

Site Investigations and Cleanup Actions

Table 1 summarizes the previous sampling at Building 688 UL#02. This table includes the sample numbers, matrices, dates, and total PCB concentrations (or laboratory detection levels if PCBs were not detected).

The following site investigation summary is based on CH2M HILL's review and interpretation of historical information contained in TWDs 95-0328 and 95-0340, which were discovered during transition of Navy documents to LMI prior to commencement of work under the Consent Agreement. From this historical documentation, it appears that in April 1995, SSPORTS performed PCB sampling activities inside Building 688. A handannotated, undated figure attached to the TWDs (Attachment 1) appears to show approximately 40 proposed sample locations on the first floor of Building 688; however, evidence exists for only four samples being collected based on the laboratory data sheets and proposed actions at two targeted locations presented in the TWDs. The laboratory data sheets for the four samples collected by SSPORTS (5103-0644, -0645, -0667, and -0668) are summarized in Table 1 and are provided with the TWDs for reference in Attachment 1. The approximate location of two of the four samples collected by SSPORTS, whose PCB concentrations were 4.09 micrograms per sample area (µg/sample) (5103-0667) and 2.45 µg/sample (5103-0645), were not specifically identified in the TWDs, but their approximate locations inside Building 688 have been plotted on Figure 2 using the locations on the hand-annotated figure in TWD 95-0328 (SSPORTS 1995a-b). The locations of the remaining two wipe samples were determined from the TWDs. Wipe sample 5103-0668 (15.1 µg/sample) was collected from a stained area in the southwestern part of Building 688, and wipe sample 5103-0644 (11.2 μg/sample) was collected from the stain in the northern part of Building 688 (SSPORTS 1995a b) (Figure 2).

As part of TWD 95-0328, SSPORTS decontaminated the stain in the northern part of Building 688 where previous wipe sample location 5103-0644 (11.2 μ g/sample) was collected (SSPORTS 1995b) (Figure 2). The floor stain was double-washed and rinsed with

industrial-strength detergent or non-ionic surfactant solution (Attachment 1). Additionally, as part of TWD 95-0340, SSPORTS decontaminated a stain in the southeast end of Building 688 where previous wipe sample location 5103-0668 (15.1 μ g/sample) was collected (SSPORTS 1995a) (Figure 2). The floor stain was double-washed and rinsed with industrial-strength detergent or non-ionic surfactant solution (Attachment 1).

According to historical laboratory data sheets, in 1996, SSPORTS collected one concrete chip sample (6120-0018) from a stain in the northern part of the building (1.6 mg/kg), one oil sample (6120-0019) from a starting compensator (3.9 parts per million) that was located in the southern portion of the building at that time, and one additional concrete sample (6120-0017) from an unknown location (1.5 mg/kg). According to visual observations from inside the building, the starting compensator from Building 688 was removed prior to CH2M HILL's involvement at the site.

On June 28, 2002, CH2M HILL collected one wipe verification sample (B688UL2WP0273) from the northern stain and one concrete chip verification sample (B688UL2CH0274) from the southeastern stain (Figure 2). PCBs were detected in wipe sample B688UL2WP0273 at a total concentration of 1.32 micrograms per 100 square centimeters (μ g/100 cm²) and in concrete chip sample B688UL2CH0274 at a total concentration of 0.42 mg/kg (Figure 2).

Polychlorinated Biphenyl Site Closure Process

According to the *Final Polychlorinated Biphenyl Work Plan* (CH2M HILL 2003), and under TSCA, NFA is appropriate under TSCA at PCB sites where the maximum remaining total PCB concentrations comply with the alternative SCRs provided in Paragraph-8-of-the—CA/FO. Five concrete wipe samples were collected at PCB Site Building 688 UL#02. Two of the concrete wipe sample locations were remediated, as described in the previous section. The remaining total PCB concentrations in wipe samples were below the $10-\mu g/100 \text{ cm}^2$ TSCA high-occupancy cleanup goal for PCBs in nonporous materials.

Three solid samples were also collected from the concrete floor of PCB Site Building 688 UL#02 (6120-0017, 6120-0018, and B688UL2CH0274). The maximum remaining PCB concentration in a concrete chip sample was 1.6 mg/kg (Aroclor-1260 in sample 6120-0018). The remaining PCB concentrations (reported as Aroclor-1260 in SSPORTS samples 6120-0017 and 6120-0018; reported as total PCBs in sample B688UL2CH0274) in solid samples meet the alternative SCRs in Paragraph 8(b)(2) of the CA/FO, which states: "For concrete and wood floors with an average PCB concentration, based on chip samples taken from the surface of dry concrete or wood which was contaminated or presumed contaminated by PCBs, of 5 ppm [parts per million] or less, with a maximum concentration of 10 ppm in any sample, the PCBs in the concrete are disposed of and require no further remediation provided that there shall be a deed restriction limiting the property to industrial use only" (USEPA et al. 2001).

Conclusions

The maximum remaining PCB concentration in concrete at PCB Site Building 688 UL#02 is 1.6 mg/kg (sample 6120-0018) and the arithmetic mean of the solid samples is 1.2 mg/kg.

Because only three data points exist for this site (all other samples have been remediated), the 95 percent upper confidence limit on the mean could not be calculated using the ProUCL model. In accordance with Paragraph 8(b)(2) of the CA/FO (an average of 5 mg/kg or less in all samples with a maximum of 10 mg/kg in any remaining sample), no further PCB cleanup is necessary at PCB Site Building 688 UL#02. Consequently, CH2M HILL requests that USEPA issue an NFA determination for PCB Site Building 688 UL#02, with implementation of a deed restriction limiting the future use to industrial purposes, in accordance Title 40, Code of Federal Regulations, Paragraph 761.61(c).

Please respond to this letter with confirmation that, in accordance with the approved *Final Polychlorinated Biphenyl Work Plan* (CH2M HILL 2003) and the CA/FO (USEPA et al. 2001), an NFA determination under TSCA is appropriate for PCB Site Building 688 UL#02. Please submit your approval of NFA for this site to Stephen Farley at the above address or via email at <u>Stephen.Farley@ch2m.com</u>. If you have questions regarding the PCB site addressed in this letter, please contact Jennifer Lindquist at 530/229-3224 or Stephen Farley at 707/562-1015, extension 103.

Sincerely,

CH2M HILL

Jennifer L. Lindquist Project Manager Stephen M. Farley, P.G. Senior Technical Consultant

BAO\092530001 (B688UL#02_USEPA.doc)

Enclosures: Table 1, Figures 1 and 2

References

CH2M HILL. 2003. Final Polychlorinated Biphenyl Work Plan. March 7.

Lennar Mare Island, the City of Vallejo, and the State of California, Environmental Protection Agency Department of Toxic Substances Control. 2001. Consent Agreement between Lennar Mare Island, the City of Vallejo, and the State of California, California Environmental Protection Agency Department of Toxic Substances Control. April 16.

Supervisor of Shipbuilding, Conversion, and Repair, Portsmouth, Virginia, Environmental Detachment (SSPORTS). 1995a. *PCB Decontamination Technical Work Document (TWD)* No. 95-0340. June.

______. 1995b. PCB Decontamination Technical Work Document (TWD) No. 95-0328. June.

SWA Group. 2000. Preliminary Land Use Plan. May 23.

Tetra Tech Environmental Management, Inc. 1999. Final Basewide Polychlorinated Biphenyl Confirmation Sampling Summary Report. Revised. January.

United States Environmental Protection Agency, United States Department of the Navy, the City of Vallejo, and Lennar Mare Island. 2001. Complaint/Consent Agreement and Final Order between Lennar Mare Island, the City of Vallejo, the U.S. Department of the Navy, and the U.S. Environmental Protection Agency Region IX. EPA Docket No. TSCA-9-2002-0002. December 20.

Copy to (with enclosures):

Mr. Henry Chui California Environmental Protection Agency Dept. of Toxic Substances Control 700 Heinz Avenue, Suite 200 Berkeley, CA 94710-2721

Mr. Michael F. McGowan, Ph.D. Arc Ecology 4634 – 3rd Street San Francisco, CA 94124 (Electronic copy only)

(2 copies; Electronic copy also)

Mr. Neal Siler Lennar Mare Island, LLC 690 Walnut Avenue, Suite 100 Vallejo, CA 94592 (Electronic copy also)

Ms. Sheila Roebuck
Lennar Mare Island, LLC
690 Walnut Avenue, Suite 100
Vallejo, CA 94592
(Electronic copy of IA D1.3 only)

Mr. Ben Harper 3003 Summit Boulevard, Suite 1800 Atlanta, GA 30319 (Electronic copy only)

Mr. John Catts 130 Camino Margarita Nicasio, CA 94946 (Electronic copy only)

CH2M HILL copies:
Paula Bolio
Clemena Balbuena
Tim Graves (Electronic copy only)
Ed Aromi (Electronic copy only)

Mr. Gil Hollingsworth Mare Island Conversion Division City of Vallejo 555 Santa Clara Street Vallejo, CA 94590-5934 (Electronic copy only)

Mr. Gordon Hart Paul, Hastings, Janofsky, Walker, LLP 55 Second Street, 24th Floor San Francisco, CA 94105-3411

Ms. Myrna Hayes 816 Branciforte Street Vallejo, CA 94590

Mr. Mike Mentink Caretaker Site Office, SF Bay 1 Avenue of the Palms, Suite 161 San Francisco, CA 94130 (2 copies)

Ms. Karen Lubovinsky 449 Union School Rd, Ste 101 Oxford, PA 19363 (Electronic copy only)

Ms. Kanan Sheth
Zurich North America Specialties
P.O. Box 307010
Jamaica, NY 11430-7010
(Electronic copy only)

Copy to (without enclosures):

Ms. Janet Whitlock U.S. Fish and Wildlife Service 2800 Cottage Way, Room W-2605 Sacramento, CA 95825 Mr. Justice Budu 107 Fieldstone Way Vallejo, CA 94589

Ms. Laurie Sullivan
National Oceanic and Atmospheric
Administration
75 Hawthorne Street, 9th Floor
San Francisco, CA 94105
(Electronic copy only via email)

Mr. Mike Coffey 6 Oricle Court American Canyon, CA 94503

Mr. Ron Pilkington Bay Area Air Quality Management District 939 Ellis Street San Francisco, CA 94109 Mr. James O'Loughlin 1449 Sheridan Drive Napa, CA 94558

Mr. Kenneth Browne 109 El Camino Real Vallejo, CA 94590

Mr. Max Delaney San Francisco Bay Commission 50 California Street, Suite 2600 San Francisco, CA 94102

Mr. Adam A. Chavez 1031 Florida Street Vallejo, CA 94590-5513

Mr. Terry Schmidtbauer Dept. of Resource Management County of Solano 675 Texas Street, Suite 5500 Fairfield, CA 94533

Mr. Gerald Karr 149 Garden Court Vallejo, CA 94591 Mr. Russell S. Sherman Vallejo Fire Department 970 Nimitz Avenue Vallejo, CA 94592

Ms. Paula Tygielski 456 East L Street Benicia, CA 94510

TABLE 1
Sample Results for PCB Site Building 688 UL#02
PCB Sites, Lennar Mare Island, Vallejo, California

Sample Number or Location Identification	Sample Matrix	Sample Date	Total PCB Concentration	Comments
5103-0644	Concrete wipe	04/14/1995	11.2 μg/sample	Stain in northern portion of building; removed under TWD 95-0328; Aroclor-1254
5103-0645	Concrete wipe	04/14/1995	2.45 μg/sample	Collected from southern portion of building; Aroclor-1254
5103-0667	Concrete or Machine wipe	04/17/1995	4.09 μg/sample	Collected from southern portion of building; Aroclor-1254
5103-0668	Concrete wipe	04/17/1995	15.1 μg/sample	Stain in southeastern portion of building; removed under TWD 95-0340; Aroclor-1254
6120-0017	Concrete chip	04/1996	1.5 mg/kg	Unknown location inside Building 688; Aroclor-1260
6120-0018	Concrete chip	04/30/1996	1.6 mg/kg	Stain in northern portion of building; Aroclor-1260
6120-0019	Oil	04/1996	3.9 ppm	Oil sample from starting compensator (removed); Aroclor-1260
B688UL2WP0273	Concrete wipe	06/28/2002	1.32 μg/100 cm ²	Verification sample associated with cleanup of 5103-0644
B688UL2CH0274	Concrete chip	06/28/2002	0.42 mg/kg	Verification sample associated with cleanup of 5103-0668

Notes:

μg/100 cm² micrograms per 100 square centimeters

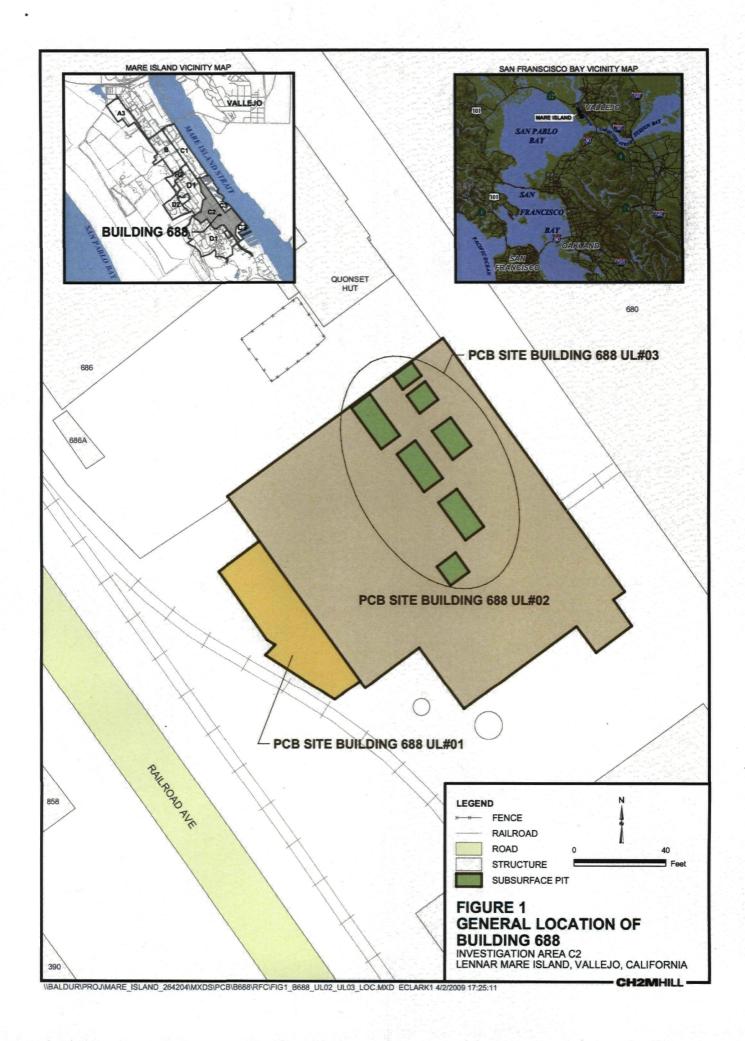
μg/sample micrograms per sample area

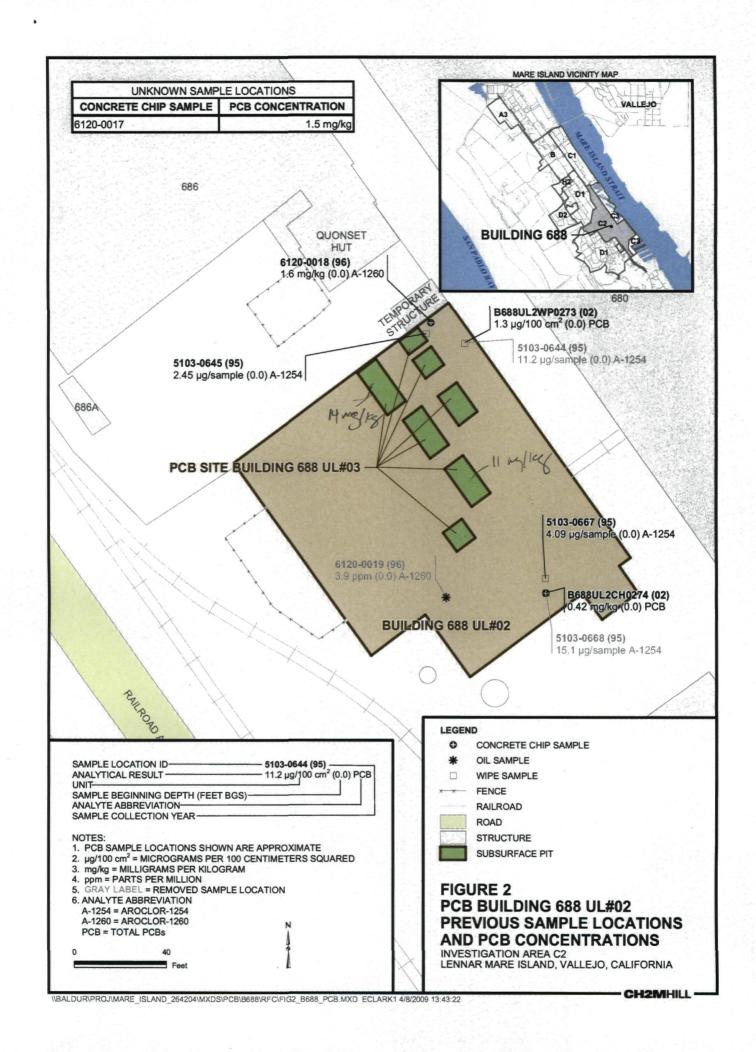
mg/kg milligrams per kilogram

ppm parts per million

PCB polychlorinated biphenyl

TWD Technical Work Document





Attachment 1

MARE ISLAND NAVAL SHIPYARD YARD ROUTE SLIP

106.4PCE	STOP B B521	I NAME	AUE KISIY EXTENSION DATE 19 JUN98
ACTION	*		COORDINATE PREPARE DRAFT RETENTION
AS DISCUSSED			FILE PREPARE FOR SIGNATURE RETURN
□ сомме	NT / CONC	UR 🗍	INFORMATION REPORT BACK
TÓ	INITIA	ALED	SUBJECT
CODE	ВУ	DATE	TWD# <u>328</u> BLDG# <u>688</u> .
106.4	9	111-	COMMENTS
100.4	XX	6/15	REVIEW Form
106.4FP -	750	915	APPROVAL
100.1			CONCURRENCE (WHEN REQUIRED)
106.1			- CONCORRENCE (WHEN REQUIRED)
106.2			CONCURRENCE (WHEN REQUIRED)-
4700 200	1		CONCURRENCE
106.32	wiff.	6/15/95	CONCURRENCE
			ITEM# N/A ON 106.04 SURVEY REPORT
			COPIES TO 300CC/EC, STATUS
106.4	10	/ / / /	LAST: LINDA REMMINGTON (COPIES TO 300EC/CC &=106.1/106.2)
108.4	1//	6-16-92	CAST. EINDA REMININGTON (COFTES TO SOCIOTO &-150-17-100-2-)
			LARRY RAMEY
			CRAIG VARNAU
			CRAIG VARINAU

MINS 5216/24 (REV 1-85)



PCB DECONTAMINATION TECHNICAL WORK DOCUMENT (TWD)

PCB CONTAMINATED MACHINE NO) FLOOR STAIN-88
-----------------------------	------------------

TWD NO.	<u>95-0328</u>	
DI DO NO	600	

MARE ISLAND NAVAL SHIPYARD VALLEJO, CALIFORNIA

Prepared by:	Distribution:	300EC
BRAC Environmental Technical Division		300CC
Code 106.4		106.4
Vallejo, Calif. 94592		106.32

PCB DECONTAMINATION TECHNICAL WORK DOCUMENT

INITIAL ISSUE

	C 114 L.	Date
Prepared by:	I send titali	1410009S
	Code 106.4	
Reviewed by:	Vennis Terre	6-15-95
	Code 106.4 (,
Approved by:	Maire	6/15/95
	Code 106.4 (Project Manager)	
Concurrence:	Wallen Hofmy	6-15-95
	Code 106.32	

Rev	Description	Approval	Date

1.0 Purpose

1.1 The purpose of this TWD is to decontaminate stained concrete floor area of building 688, (1st floor). The stain is located in the northeast side of building 688 (see sketch on enclosure 3). The stain contains 11.2 ug/100 sq. cm. for sample 5103-0644. The result exceeds the acceptable PCB level of 10 ug/100 sq. cm. (see enclosure 1) as described in reference 3.2. The sample number should be marked near the sample location. Code 106.4 shall be contacted at 6-7657 if sample number is missing from the area.

2.0 Description

2.1 The floor oil stain shall be decontaminated using the procedures required by this TWD.

3.0 References

- 3.1 NAVSHIPYDMAREINST 5100.36 -- Shipyard Occupational Safety and Health Workplace Manual, Mare Island Naval Shipyard, Occupational Safety, Health, and Environmental Office -- Code 106
- 3.2 Workplan PCB Decontamination for Spill Sites, Mare Island Naval Shipyard, Code 106.4.
- 3.3 Mare Island Naval Shipyard Environmental Protection Manual of 1 February 1994

4.0 Health & Safety Section / General Notes

4.1 All work performed shall be in strict adherence to the shipyard Occupational Safety and Health (OSH) Manual (reference 3.1) the General Health & Safety Plan, Section 4 of reference 3.2., and the Health and Safety Section of this TWD.

- 4.2 At least two people shall be present at all times while chemical or physical hazards exist and access is being controlled to the PCB Work Area.
- 4.3 Personal protective equipment (PPE) shall be as follows:

Saranex coated tyvek coveralls

Viton gloves with latex gloves worn over them

Steel toed boots (if worn without coverings shall be washed with detergent and rinsed).

Nitrile or neoprene foot coverings may be worn over steel toed boots.

Face shield (8" minimum) with vented goggles (while cleaning)

4.4 Workers performing decontamination shall have received the following training as a minimum:

PCB Handling Controls (course YJ-B010)

Hazcomm (course YJ-A552)

- 4.5 The main hazard at the site is PCBs on the floor. Slip and trip hazards are existent due to raised floor from water damage. Ventilation is adequate as the building is vacant and is large, and this will provide fresh air.
- 4.6 Temperatures above 100 degrees are not expected, nor is any hot work authorized, so PCBs will not be airborne.
- 4.7 Site access shall be controlled using the following areas:
 - Hot Zone The area of the spill site. Personnel entry to the hot zone shall be minimized. The area to be decontaminated and disposed of is the hot zone plus the buffer zone.
 - •Buffer Zone A one (1) foot wide area adjacent to and surrounding the hot zone.
 - •Warm Zone An area approximately three (3) feet by six (6) feet near the hot zone established by this TWD. The warm zone shall be used for exiting PPE decontamination procedures. The warm zone shall be established prior to beginning decontamination.

These areas shall be posted to exclude unauthorized personnel and the building shall be locked when not in use.

- 4.8 An emergency eyewash station with a 15 minute minimum capacity shall be accessible in 10 seconds or less from the work area.
- 4.9 Phone numbers are as follows:

Hospital: 9-911 or 646-4444

Ambulance: 9-911 or 646-4444

Spill team:

646-0182 or 0183

Fire: 9-911 or 646-3333

Police: 9-9

9-911 or 646-2222

Project Mgr.: 646-5945

Emergency: 9-911

- 4.10 Contact Code 106.4, L. Ramey at 6-7657 immediately after the floor decontamination. Resampling after decontamination is required by Code 106.4.
- 5.0 Decontamination Procedures

5.1 Support Area (Personal Decontamination)

Personal decontamination is required for PPE and cleaning equipment that comes in contact with PCB contaminated surfaces or PCB contaminated cleaning fluid and materials. Personal decontamination shall be performed in the warm zone, as defined in Section 4.7, and shall be performed in accordance with Section 4.9 of reference 3.2. The floor of the warm zone and routes between the warm zone and the hot zones shall be covered with plastic drop cloths to avoid spread of contamination.

5	2	Н	2	D	F۱	n i	m	c

Code 106.4 will provide minimum specific health and safety information in Section 4.0 of each TWD. This information in most cases will be sufficient. Personal preferences regarding PPE and communication methods, and changes at the decontamination site from the time the TWD was written to when the decontamination is accomplished/completed may cause a change to the health and safety information provided. Therefore, the On-Site Health and Safety Coordinator, just prior to and during decontamination, shall review HSP forms 4.6, 4.15 and 4.16 of reference 3.2 and complete forms if: 1) one of the conditions mentioned in the previous sentence exist or 2) the TWD does not cover an item, e.g. communications, on HSP form 4.16. Any down grading of health and safety information (PPE and air monitoring) will only occur upon written approval of Code 106.4. HSP Acceptance Form 4.17 (enclosure 2), must be completed and signed by each person performing decontamination.

5.3	Sampling Evolution (Place an <u>x</u> or number on applicable line)
	Initial Sampling X Resampling (1,2,3,etc.)
5.4 ·	Specific Instructions:
	Perform decontamination of floor stain in accordance with the applicable general
	instructions set forth in reference 3.2, section 2, paragraph 2.5.1, and the specific
	requirements as follows: Before starting decon move work bench out of the way.
	Double wash /rinse entire stain on concrete area with industrial strength detergent
	or non-ionic surfactant solution, following steps in paragraph 2.5.2.1. All waste
	(including rags, gloves, etc.) shall be packaged and handled as PCB
	contaminated waste. Properly contain, store, label and dispose of contaminated
	debris, absorbents, rags, and other materials resulting from the decontamination.
	Latest disposal requirements are in reference 3.3 (Chapter 9, 4.c.(1).
5.5	Other Instructions
•••	Resampling is required (see paragraph 4.10) Code 106.4 shall take a solid
	sample of the concrete area.
5.6	The shop performing the decontamination shall sign below to certify that the
	decontamination conforms to this TWD.
5.6.1	Code 300EC performed decontamination of floor oil stains in building 688 as
	required.
	roquirou.
	Code 300EC Date
	Return completed information package (TWD and HSP forms) for this floor stain
	to the project engineer, Code 106.4 PCBs, Building 521, second floor.
	Code 106.4 Engineering Review and Approval and Resampling Results ptance
	Code 106.4 conduct review and approval of information package. Floor oil stain decontamination conforms with requirements of this TWD.
	Code 106.4

6.2	Code 106.4 review and acceptance of resampling results. For results to be satisfactory they must be \leq 10 μ g/100 sq. cm. for wipe samples and < 50 ppm for other samples where no release to the environment has occurred. Results are: UNSAT (remarks required) Remarks:			
•;	Code 106.4	Date		
7.0	Enclosures (1) Sample Results (2) Health And Safety Plan A (3) Sketch	cceptance Form		



ANALYTICAL REPORT

		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
Mare Island Naval Shipyard	Date Sampled:	04/14/95
Code 106.14, Stop T-56	Date Received:	04/25/95
Building 1345	Daté Extracted:	04/26/95
Vallejo, CA 94592-5100	Date Analyzed:	05/13/95
	Work Order No.:	95-04-516
Attn: Tammi Kratzel	Method: El	PA 8080 (PCBs)
RE: Contract No. N00123-92-D-4011	Page 12 of 20	

All results are reported in µg/sample.

Sample Number: 5897-95 (688/05-F2/floor oil stain #) しいつきつかいのす

Δnalyte	Concentration	. Reportable Limit
Aroclor-1016	NĐ.	0.1
Aroclor-1221	ЙĎ	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ЙÒ	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	11.2	0.1
Aroclor-1260	ND	0.1
Aroclor-1262	C114	0.1
Sample Number: 5898	-95 (688/05-F2/floor oil stain #)	
Aroclor-1016	ΝĎ	0.1
Aroclor-1221	CIM	0.1
Aroclor-1232	МD	0.1
Aroclor-1242	CHA	0.1
Aroclor-1248	ND	0.1
Arodor-1254	2.45	0.1
Aroclor-1260	(414	0,1
Aroclor-1262	ND	U 1

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ENCLOSURE

1944 G 1945

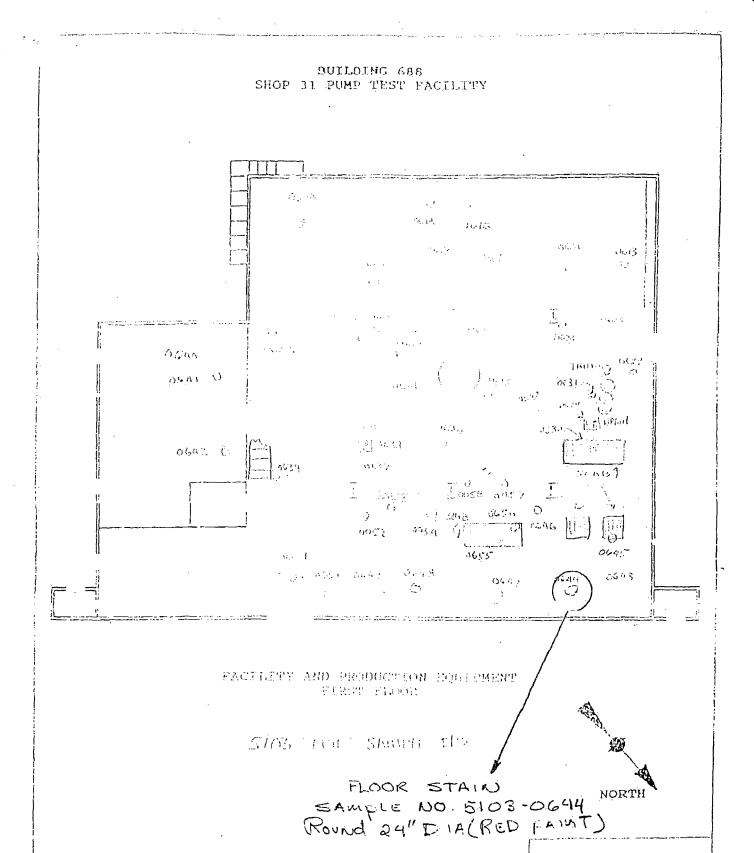
Health And Safety Plan Acceptance Form

at the PCB wor	k area. Attach the completed forms to the TWD.
TWD No.:	95-0328
PCBCM#:	FLOOR STAIN 88
By my signatur	e below, I acknowledge that I have read and understand the contents of
the Health & Sa	afety Plan for this project. I agree to perform my work in accordance
with the Health	and Safety Plan.
Signatu	re.
Print Na	ame
Code	
Date	
By my signatu	e below, I acknowledge that I have read and understand the contents of
the Health & S	afety Plan for this project. I agree to perform my work in accordance
with the Health	and Safety Plan.
Signatu	ıre
Print N	ame
Code	
Date	

INSTRUCTIONS: This form is to be completed by each person prior to beginning work

TWD 95-0328

Enclosure 2



ENCLOSURE 3

1/

MARE ISLAND BLDG 688

ENCLOSURE (1) SHEET 7 OF 8

MARE ISLAND NAVAL SHIPYARD YARD ROUTE SLIP

106.4PCE	<u>3 </u>		L. RAMEY 6-7657 DATE
X ACTIC	XI)		COORDINATE PREPARE DRAFT RETENTION
AS DI	SCUSSE	D	FILE PREPARE FOR SIGNATURE RETURN
COMME	NT/CON	CUR 🔲	INFORMATION REPORT BACK
то	INITI	ALED	SUBJECT FOR TWO ACTROLL
CODE	BY.	DATE	REQUEST FOR TWD ACTION
PAINE			COMMENTS (SEE ATTACHED ANALYSIS RECORD)
			EQUIPMENT DESCRIPTION: 320
VARNAU	(V 6-	6/9	A. 01
			W.
			EQUIPMENT ID NO:
Kish			
	<u>.</u>		
			EQUIPMENT LOCATION:
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			Land to the state of the state
			SAMPLE TYPE:
			SAMPLE TITE.
	•		
			SCHEDULED DISPOSITION:
			Re alphost



ANALYTICAL REPORT

Mare Island Naval Shipyard	Date Sampled:	04/14/95
Code 106:14, Stop T-56	Date Received:	04/25/95
Building 1345	Date Extracted	04/26/95
Vallejo, CA 94592-5100	Date Analyzed:	05/13/95
· ·	Work Order No.:	95-04-516
Attn: Tammi Kratzel	Method: EP,	A 8080 (PCBs)
RE: Contract No. N00123-92-D-4011	Page 12 of 20	

All results are reported in ug/sample.

Sample Number: 5897-95 (688/05-F2/floor oil stain #) [いっこうコンプラ

Analyte	Concentration	Reportable <u>Ljmit</u>
Aroclor-1016	ND	0 1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	11.2	0.1
Arocior-1260	DIA	0.1
Aroclor-1262	ND	0.1
Sample Number: 5898-95 (6	888/05-F2/floor oil stain #)	
Aroclor-1016	ND	0,1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	. 0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0 1
Aroclor-1254	2.45	0.1
Aroclor-1260	ND	0.1
Aroclor-1262	ND	0.1

Muhan

1331 Saachad Dore Day

95-M-0905

Doc Num 51070427 Page 3 of 4

ACDRESS	BLOCK	

From Tammi Kratzel MINSY Code 106.14 Stop TS6 Bldg 1345 Vallejo, CA 94592-5100 Tel (707) 646-0181 Fax (707) 646-0184 To Cal Science Environmental laboratories, Inc.
11631 Acaboard Cyrcle
Stanzon eal 90800
Tel (714) 895-5494 Fax (714) 894-7501

INSTRUCTION BLOCK

Turnaround Time: Written QC Report Required?

[] Same Day [] 24 Hrs [] 48 Hrs [] 5 Days [X] 10 Days [] Rush [X] Routine QC [] R4QCB

PCB SAMPLE DATA BLOCK

C106.14 Sample Number	C106.4 Sample 10	Location/Parcel/Description	Sampli Date	ng Time		Water Grab	Solid/Scil Filter			Cont Size	Analysis Required
5895.95	5103-0642	688/05-F2/floor oil stain #	04/14/95	13:25	[]	[]	[X]	[2]	[1]	[40ml]	3001AF
5896-95	5103-0643	688/05-F2/floor oil stain #	04/14/95	13:35	()	()	(X)	[2]	(1)	[40ml)	3001AP
5897-45	5103-0644	688/05-F2/floor oil stain #	04/14/95	13:45	{ }	[]	(X)	[2]	(1)	[40ml]	300:4P
5898-55	5103-0645	688/05-F2/floor oil stain #	04/14/95	13:55	[]	[]	(X)	(2)	[1]	(40ml)	30 91 45
5899-95	5103-0646	688/05-F2/floor oil stain #	04/14/95	14:05	[]	[]	(X)	[2]	(1)	1 40mt]	30 <u>01A</u> P
		688/05-F2/floor oil stain #	04/14/95	14:15	[]	(·)	(X)	[2]	(1)	[40mt]	3001AP
5901-15	5103-0648	688/05-F2/floor oil stain #	04/14/95	14:25	[]	[]	(X)	ξξj	[1]	t 40ml3	3001AP
5902-55	5103-0649	688/05-F2/floor oil stain #	04/14/95	14:35	[]	(1	(x)	[2]	111	{ 40m()	3001AP
5903-55	5103-0650	688/05-F2/floor oil stain #	04/14/95	14:45	()	f 1	(X).	[2]	[1]	[40ml]	30C+AP
			04/14/95	14:55	[]	[]	[X]	(2)	(1)	[40ml]	300tar
Type: [1] swi	ipe mn ext,	[2] swipe spill, [3] swipe resv int,]	(4) solid spill,	[5] oil	res r	nn, [6] i	water grab,	77. bt.	ank		

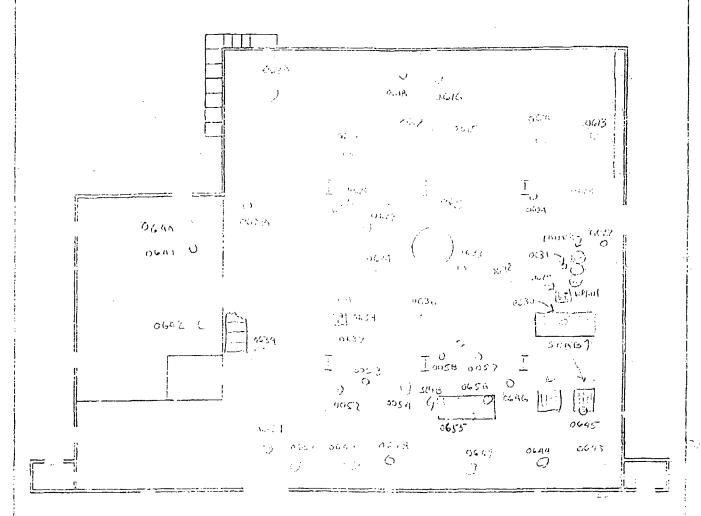
CHAIN OF CUSTODY RECORD

Data Transferred by: (Signature)	VIII /	Date:/	Time: 0900
Relinquished by: (Signature)	Received by: (Signature)	Date: / /95	Time: / 000
Relinquished by: (Signature)	Received by: (Signature)	Dare/17/95	1333
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received for Laboratory: (Signature)	Date:	Time:

PCB SURVEY AND SAMPLE DATA SHEET (ADDON SHEET)

Bldg <u>Fire</u> Flo	oor <u>i</u> Colu	ting	beu0, qaM						
Desc FCCR .	EN IN	Manuf _			Mode	A Buing		Ma	nuf Sec Num
roperty Number	·		Alpha		-		Nom of	Samples _	,
SAMPLE DATA E	N DCK					•			
SAMPLE DATA E						• • • • • • • • • • • • • • • • • • • •		* · · · · * * · · · · · · · · · · · · ·	
	Sample ID	Date	Line	Oil Grab	Water Grab	Solid/Soit Filter	Түре	Cont Size	Remarks
	5103-0640	4-111-45	1. ;	L J	[]	t')	U 2.1	1 31	La Committee
	5103-0641	7 471	1	ĹÀ	[]	1-1	[3]	(· ··· 1	· · · · · · · · · · · · · · · · · · ·
	5103-0642	4711-15	<u>, ; , , , , , , , , , , , , , , , , , ,</u>	L · j	[]	0.1	CC 1	$I_{+}P_{-}$	
	5103-0643	1 27/4 - 7/4	<u> </u>	į j	[]	[]	ı in	['%]	
	5103-0644	*-1-1311	11115	()	[]	(°)	1 1	[- 1	
	5103-0645	4-14-14	<u> </u>	T J	[]	[]	r 1 ,1	$\{i,j,j\}$	
	5103-0646	4-14-97	1. 05	()	E J	E: 1	1 ? 1	ែរភូរ	
	5103-0647	4-111-11	2:15	t j	[]	(5 · 1	171	[44]	
	5103-0648	4 .14 .11	2 25	[]	[]	[+]	[-1	[(4.4)	
TCH BLOCK		[2] swipe spi	ll, [3] swip	e ress	v int,	[4] solid s	pill, [5]	oit res	mm, [6] water grab, [7] blan
TCH BLOCK	pe min ext,	(2) swipe spi	ll, (3) swip	oe ness	v int,	(4) solid s	pill, [5]	oit res	mm, [6] water grab, [7] blan
TCH BLOCK		[2] swipe spi	ll, [3] swip	oe riesy	v int,	(4) solid s	pill, [5]	oit res	mm, [6] water grab, [7] blan
TCH BLOCK		[2] swipe spi	ll, [3] swip	e ress	v int,	(4) solid s	pill, [5]	oit res	ma, [6] water grab, [7] blan
TCH BLOCK		[2] swipe spi	ll, [3] swip	e ress	v int,	(4) solid s	pill, [5]	oil res	mm, [6] water grab, [7] blan
TCH BLOCK		[2] swipe spi	ll, [3] swip	e resn	v int,	(4) solid s	pill, [5]	oil res	ma, [6] water grab, [7] blan
TCH BLOCK		[2] swipe spi	ll, [3] swip	e resn	v int,	(4) solid s	pill, [5]	oil res	mm, [6] water grab, [7] blan
TCH BLOCK		[2] swipe spi	ll, [3] swip	e ress	v int,	(4) solid s	pill, [5]	oil res	mm, [6] water grab, [7] blan
TCH BLOCK		[2] swipe spi	ll, [3] swip	e ress	v int,	(4) solid s	pill, [5]	oil res	mm, [6] water grab, [7] blan
TCH BLOCK		[2] swipe spi	ll, [3] swip	e ress	v int,	(4) solid s	pill, [5]	oil res	mm, [6] water grab, [7] blan
TCH BLOCK		[2] swipe spi	ll, [3] swip	e ress	v int,	(4) solid s	pill, [5]	oil res	mm, [6] water grab, [7] blan
TCH BLOCK		[2] swipe spi	ll, [3] swip	e ress	v int,	(4) solid s	pill, [5]	oil res	mm, [6] water grab, [7] blan
TCH BLOCK (A) (Sept.) Total Sept.)	cen, tabeted	, sealed, rea	corded, store	ed ànd	Secur	ed from tamp	ering by	unauthor	ized personnel as required by
TCH BLOCK Sples were tak Section 3 of "Possible Spill	cen, tabeted	, sealed, rea	corded, store	ed ànd	secur hanica	ed from tamp L Machinery"	ering by	unauthor rk Plan P	ized personnel as required by CB Survey and Sampling For
TCH BLOCK	cen, tabeted	, sealed, rea	corded, stor d Sampling Fo	ed ànd or Mecl	secur hanica um 1)	ed from tamp	ering bý ; or "Wo Date <u>'</u>	unauthor rk Plan Po	ized personnel as required by CB Survey and Sampling For

SUILDING 688 SHOP 31 PUMP TEST FACILITY



FACILITY AND PRODUCTION EQUIPMENT FIRST FLOOR

5103 TARKE SMARKE HIS



MARE ISLAND BLDG 688 ENCLOSURE (1) SHEET 7 OF 8

02242

MARE ISLAND NAVAL SHIPYARD YARD ROUTE SLIP

106.4PC	B 852	1 NAME	OUG WOOTEN 67659 G-16-95
ACTION	1		COORDINATE PREPARE DRAFT RETENTION
AS DIS	CUSSED		FILE PREPARE FOR SIGNATURE RETURN
□ сомме	ENT / CONC	UR .	INFORMATION REPORT BACK
то	INITI	ALED	SUBJECT
CODE	BY	DATE	TWD# <u>95-0340</u> BLDG# <u>688</u>
			COMMENTS
106.4	27	6/16	REVIEW
106.4FP	Ro	6/16	APPROVAL
106.32	25	6/13/95	CONCURRENCE
			ITEM#N_/A_ON 106.04 SURVEY REPORT
·			COPIES TO 300CC/EC, STATUS
<u></u>			
106.4	IR	6-2095	LAST: LINDA REMMINGTON (COPIES TO 300EC/CC
			LARRY RAMEY
			CRAIG VARNAU
		_	

MINS 5216/24 (REV 1-85)



PCB DECONTAMINATION TECHNICAL WORK DOCUMENT (TWD)

PCB CONTAMINATED MACHINE NO	FLOOR STAIN-88	8
-----------------------------	----------------	---

TWD NO.	95-0340
BLDG NO.	688

MARE ISLAND NAVAL SHIPYARD VALLEJO, CALIFORNIA

Prepared by:	Distribution:	300EC
BRAC Environmental Technical Division		300CC
Code 106.4		106.4
Vallejo, Calif. 94592		106.32

PCB DECONTAMINATION TECHNICAL WORK DOCUMENT

INITIAL ISSUE

		Date
Prepared by:	Donala Wooten	0/16/05
Reviewed by:	a Code 106.4	6-16-95
	Code 106.4	
Approved by:	Pefaine	6/16/25
	Code 106.4 (Project Manager)	
Concurrence:	Colayma Schelen	6/17/95
	Code 106.32	

Rev.	Description	Approval	Date

1.0 Purpose

1.1 The purpose of this TWD is to decontaminate stained area on the painted concrete area of building 688, (1st floor). The stain is located in the southeast end of building 688 (see sketch on enclosure 3). The stain contains 15.1 ug/100 sq. cm. for sample 5103-0668. The result exceeds the acceptable PCB level of 10 ug/100 sq. cm. (see enclosure 1) as described in reference 3.2. The sample number should be marked near the sample location. Code 106.4,B.Turner shall be contacted at 6-2471 if sample number is missing from the area.

2.0 Description

2.1 The floor oil stain shall be decontaminated using the procedures required by this TWD.

3.0 References

- 3.1 NAVSHIPYDMAREINST 5100.36 -- Shipyard Occupational Safety and Health Workplace Manual, Mare Island Naval Shipyard, Occupational Safety, Health, and Environmental Office -- Code 106
- 3.2 Workplan PCB Decontamination for Spill Sites, Mare Island Naval Shipyard, Code 106.4.
- 3.3 Mare Island Naval Shipyard Environmental Protection Manual of 1 February 1994

Data

- 4.0 Health & Safety Section / General Notes
- 4.1 All work performed shall be in strict adherence to the shipyard Occupational Safety and Health (OSH) Manual (reference 3.1) the General Health & Safety Plan, Section 4 of reference 3.2., and the Health and Safety Section of this TWD.
- 4.2 At least two people shall be present at all times while chemical or physical hazards exist and access is being controlled to the PCB Work Area.
- 4.3 Personal protective equipment (PPE) shall be as follows:

Saranex coated tyvek coveralls

Viton gloves with latex gloves worn over them

Steel toed boots (if worn without coverings shall be washed with detergent and

Nitrile or neoprene foot coverings may be worn over steel toed boots.

Face shield (8" minimum) with vented goggles (while cleaning)

4.4 Workers performing decontamination shall have received the following training as a minimum:

PCB Handling Controls (course YJ-B010)

Hazcomm (course YJ-A552)

- 4.5 The main hazard at the site is PCBs on the floor. Ventilation is adequate as the building is vacant and is large, and this will provide fresh air.
- 4.6 Temperatures above 100 degrees are not expected, nor is any hot work authorized, so PCBs will not be airborne.
- 4.7 Site access shall be controlled using the following areas:
 - Hot Zone The area of the spill site. Personnel entry to the hot zone shall be minimized. The area to be decontaminated is the hot zone plus the buffer zone.
 - •Buffer Zone A one (1) foot wide area adjacent to and surrounding the hot zone.
 - •Warm Zone An area approximately three (3) feet by six (6) feet near the hot zone established by this TWD. The warm zone shall be used for exiting PPE decontamination procedures. The warm zone shall be established prior to beginning decontamination.

These areas shall be posted to exclude unauthorized personnel and the building shall be locked when not in use.

- 4.8 An emergency eyewash station with a 15 minute minimum capacity shall be accessible in 10 seconds or less from the work area.
- 4.9 Phone numbers are as follows:

Hospital: 9-911 or 646-4444

Ambulance: 9-911 or 646-4444

Spill team:

646-0182 or 0183

Fire:

9-911 or 646-3333

Police:

9-911 or 646-2222

Project Mgr.: 646-5945

Emergency: 9-911

4.10 Contact Code 106.4, B.Turner at 6-2471 immediately after the floor decontamination. Resampling after decontamination is required by Code 106.4.

5.0 Decontamination Procedures

5.1 Support Area (Personal Decontamination)

Personal decontamination is required for PPE and cleaning equipment that comes in contact with PCB contaminated surfaces or PCB contaminated cleaning fluid and materials. Personal decontamination shall be performed in the warm zone, as defined in Section 4.7, and shall be performed in accordance with Section 4.9 of reference 3.2. The floor of the warm zone and routes between the warm zone

and the hot zones shall be covered with plastic drop cloths to avoid spread of contamination.

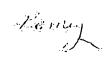
5.2 HSP Forms

Code 106.4 will provide minimum specific health and safety information in Section 4.0 of each TWD. This information in most cases will be sufficient. Personal preferences regarding PPE and communication methods, and changes at the decontamination site from the time the TWD was written to when the decontamination is accomplished/completed may cause a change to the health and safety information provided. Therefore, the On-Site Health and Safety Coordinator, just prior to and during decontamination, shall review HSP forms 4.6, 4.15 and 4.16 of reference 3.2 and complete forms if: 1) one of the conditions mentioned in the previous sentence exist or 2) the TWD does not cover an item, e.g. communications, on HSP form 4.16. Any down grading of health and safety information (PPE and air monitoring) will only occur upon written approval of Code 106.4. HSP Acceptance Form 4.17 (enclosure 2), must be completed and signed by each person performing decontamination.

5.3	Sampling Evolution (Place an <u>x</u> or number on applicable line) Initial Sampling (1,2,3,etc.)
5.4	Perform decontamination of floor stain in accordance with the applicable general instructions set forth in reference 3.2, section 2, paragraph 2.5.1, and the specific requirements as follows: Double wash / rinse entire stain on concrete area with industrial strength detergent or non-ionic surfactant solution, following steps in paragraph 2.5.2.1. All waste shall be packaged and handled as PCB contaminated waste. Properly contain, store, label and dispose of contaminated debris, absorbents, rags, and other materials resulting from the decontamination. Latest disposal requirements are in reference 3.3 (Chapter 9, 4.c.(1).
5.5	Other Instructions Resampling is required (see paragraph 4.10) Code 106.4 shall take a swipe sample of the concrete area
	The shop performing the decontamination shall sign below to certify that the decontamination conforms to this TWD. Code 300EC performed decontamination of floor oil stains in building 688 as required.
	Code 300EC Date
	Return completed information package (TWD and HSP forms) for this floor stain to the project engineer, Code 106.4 PCBs, Building 521, second floor.

6.0 Code 106.4 Engineering Review and Approval and Resampling Results Acceptance

6.1	Code 106.4 conduct review and approva decontamination conforms with require	
	Code 106.4	Date
6.2	Code 106.4 review and acceptance of re	esampling results. For results to be q. cm, for wipe samples and < 50 ppm for environment has occurred. AT (remarks required)
	<u> </u>	
	Code 106.4	Date
7.0	Enclosures (1) Sample Results (2) Health And Safety Plan Acceptance (3) Sketch	Form





ANALYTICAL REPORT

Mare Island Naval Shipyard	Date Sampled:	04/17/95
Code 106.14, Stop T-56	Date Received:	04725/95
Building 1345	Date Extracted:	04/28/95
Vallejo, CA 94592-5100	Date Analyzed:	06/05/95
•	Work Order No.:	95-04-517
Attn: Tammi Kratzet	Method: EP	A 8080 (PCBs)
RE: Contract No. N00123-92-D-4011	Page 1 of 6	

All results are reported in µg/sample.

Sample Number: 5978-95 (688/05-F2/misc & oil stain #)

<u>Analyle</u>	. Concentration	Réportable Limit
Aroclor-1016	CIN	0.1
Aroclor-1221	ПD	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	4.09	0.1
Aroclor-1260	ND	0.1
Aroclor 1262	CIN	0.1
Sample Number:	5979-95 (688/05-F2/misc & oil stain #) 5/03 - 066	8]
Aroclor-1016	ND	0.1
Aroclor-1221	. ND	.0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND	0.1
Aroclor-1254	15.1	0.1~
Aroclor-1260	ND	0.1
Aroclor-1262	ОИ	0.1

Enclosure 1

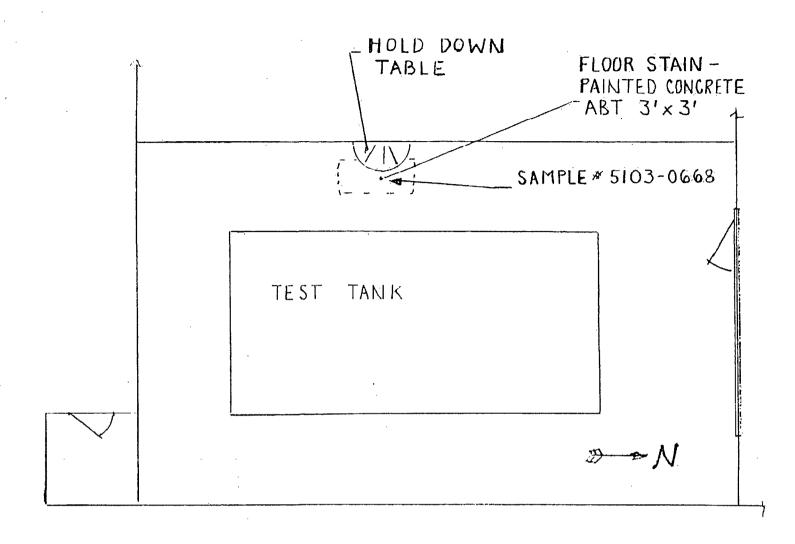
Health And Safety Plan Acceptance Form

at the PCB work area. Attach the completed forms to the TWD.

TWD No.:	95-0340
PCBCM#: _	FLOOR STAIN -88
Bv mv signature	below, I acknowledge that I have read and understand the contents of
	fety Plan for this project. I agree to perform my work in accordance
	and Safety Plan.
THE TOURS	· · · · · · · · · · · · · · · · · · ·
Signatur	e
Print Na	me
Code	<u> </u>
Date	
Date	
By my signature	e below, I acknowledge that I have read and understand the contents of
the Health & Sa	afety Plan for this project. I agree to perform my work in accordance
with the Health	and Safety Plan.
Signatur	·e
Print Na	me
Code	
Date	

INSTRUCTIONS: This form is to be completed by each person prior to beginning work

Enclosure 2



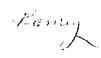
PLAN VIEW
BLDG. 688-SOUTHEAST CORNER
OF BUILDING

SKETCH- FLOOR STAIN BLDG. 688

ENCLOSURE 3.
TWD 95-0340

MARE ISLAND NAVAL SHIPYARD YARD ROUTE SLIP

106.4PC	BISTOP	ama K	L. RAMEY	E.	6-7657	DATE
X ACT	ion)		COORDINATE	PREPARE DRAF	art.	RETENTION
AS	DISCUSSE	· []	FILE	PREPARE FOR	SIGNATURE	RETURN
СОМ	MENT/CONG	CUR 🗍	INFORMATION	REPORT BACK		
TO INITIALED			SUBJECT	ST FOR TW	~ ^ ^ * ^ * ^	K I
CODE	ΕΥ	DATE	KEQUE	SI FOR IW	D ACTIO	
PAINE			COMMENTS (SEE	ATTACHED AN	ALYSIS RECO	ORD)
			FOUIPMENT T	ESCRIPTION:		- AHO
VARNAU	1150	6/15		DESCRIPTION:	<u> </u>	77
					Zi vi	
			EQUIPMENT]	· · · · · · · · · · · · · · · · · · ·	(10)	
Western						
, , , , , , , , , , , , , , , , , , ,						
			EQUIPMENT	LOCATION:		
				: 64 75Q		
			SAMPLE TYP	E:		
	<u> </u>	·	<u> </u>	1176		
				*		
			SCHEDULED	DISPOSITION	•	
			1	2000A		
		-				
		1				





ANALYTICAL REPORT

Mare Island Naval Shipyard	Date Sampled:	04/17/95
Code 106.14, Stop T-56	Date Received:	04/25/95
Building 1345	Date Extracted:	04/28/95
Vállejo, CA 94592-5100	Date Analyzed:	06/05/95
	Work Order No.:	95-04-517
Attn: Tanimi Kratzel	Method: EP	A 8080 (PCBs)
RE: Contract No. N00123-92-D-4011	Page 1 of 6	, ,

All results are reported in ng/sample.

Sample Number: 5978-95 (688/05-F2/misc & oil stain #)

		Reportable
<u>Analyte</u>	Concentration	Limit
Aroclor-1016	ND	0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND:	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	·ND	0.1
Aroclor-1254	4.09	0.1 -
Aroclor-1260	ND	0.1
Aroclor-1262	ND	0.1
Sample Number: 5979	-95 (688/05-F2/misc & oil stain #)[<i>\\$\\</i>	03-0669]
Aroclor-1016	ND	.0.1
Aroclor-1221	ND	0.1
Aroclor-1232	ND	0.1
Aroclor-1242	ND	0.1
Aroclor-1248	ND ,	0.1
Aroclor-1254	15.1	0.1
Aroclor-1260	ND	0.1
Aroclor-1262	ND	0.1



95-m-0905

Dog Num 51070435 Page 1 of 2

ADDRESS BLOCK

From Tammi Kratzel
HINSY Code 106.14 Stop T56 Bldg 1345
Vallejo, CA 94592-5100
Tel (707) 646-0181 Fax (707) 646-0184

To Cal Science Environmental Laboratories, Inc. 11631 Seaboard Circle Stantol CA 90680 Mel (714) 895-5494 Fax (714) 894-7501

INSTRUCTION BLOCK

Turnaround Time: Written OC Report Required?

[] Same Day [] 24 Hrs [] 48 Hrs [] 5 Days [X] 10 Days [] Rush [X] Routine OC [] RWQC3

PCB SAMPLE DATA BLOCK

	0106.14 Sample Number	C106.4 Sample ID	Location/Parcel/Description	Sampli Date			Water Grab	Solid/Soil Filter	Type		Cont Size	Analysis Required
-	5978-95	5103-0667	688/05-F2/misc & oil stain #	04/17/95	8:00	[]	[]	. tx1	[2]	[1]	{ 40ml	3COTAP
			688/05-F2/misc 2 cil stain #	04/17/95	8:15	[]	[]	(X)	[2]	[1]	(40mL	300424
			688/05-F2/misc & cil stain #	04/17/95	8:30	[]	£]	[X]	(2)	[1]	[40mt	300+40
			688/05-F2/misc & cil stain #	04/17/95	8:45	(X)	[]	[]	[5]	[1]	(40mi	3001AH
-	598275	5103-0671	688/05-F2/misc & oil stain #	04/17/95	9:00	(·]	[]	(X)	[2]	[1]	[40ml	300°AP
			688/05-F2/misc & oil stain #	04/17/95	9:15	[]	[]	[X]	[2]	[1]	(, 40ml	300+40
-	5984-15	5103-0673	688/05-F2/misc & oil stain #	04/17/95	9:30	[]	[]	{X}	[2]	(1)	{ 40ml	300:40
			688/05-F2/misc & oil stain # RANK	04/17/95	9:45	{ }	1.1	[X]	(書)	[1]	[40ml	3081AP
-	5986-95	5103-0676		04/17/95				(X)	[2]	[1]	[40ml	30040
j	5987-95	5103-0677	688/05-F2/misc oil stain #	04/17/95	10:15	[]	[]	[X]	[2]	[1]	[40ml	300:AP
			[2] swipe spill, [5] swipe/flesv int, [4] sol					ater grab,	(7) bu	enk		

CHAIN OF CUSTODY RECORD

Data Transferred by: (Signature)		0 ate / 12/95	Time: 1500
Relinquished by: (Signature)	Received by: (Signature)	Date/ 4/12/95	Time: 1600
Relinquished by: (Signature)	Received by: (Signature)	Date: 4/18/95	line:
Relinquished by: (Signature) /	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received for Laboratory: (Signature)	Date:	Time:

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PCB SURVEY AND SAMPLE DATA SHEET (ADDON SHEET)

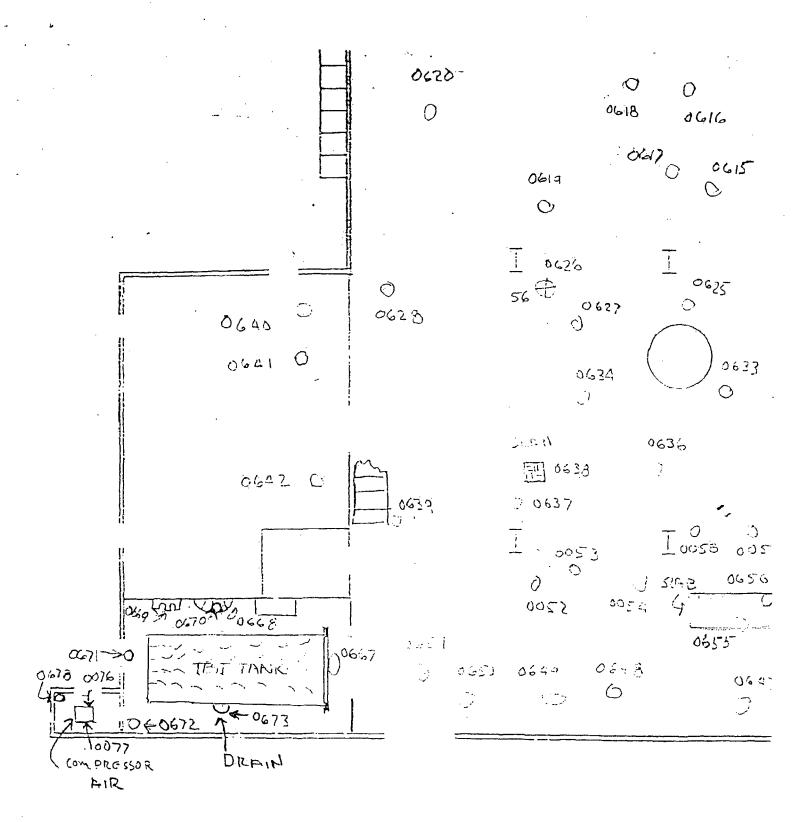
		Manu f			Model Hum			Manuf Ser Num		
operty Number			Alpha				Num Of S	mples_		
SAMPLE DATA R	LOCK									
	Sample	Date	Time		Water Grab	Solid/Soil Filter	Турс	Cont Size	Remarks	
	5103-0667	<u>4-17-95</u>	8000	[]	[]	('`C'1	[5]	(40 T	FLOOR CONCLETE SCULPE	
	5103-0668	4-17-95	<u>8:15</u>	[]	[-]	[4]	[_{Z_}]	ran 1	- VS - VS - W	
	5103-0669	4-17-47	8.30	[]	1,1	(Y) ([5]	t this	HOLDER BASEPRINE Sugar	
	5103-0670	4-17-15	8.45	ſΥĺ	[]	[]	(<u>5</u> 1	[40]	THING INCO DENT TOP	
	5103-0671	4-17-95	9300	[]	[]	L-)	[2]	1401	FLOOR CONCESSIONS	
	5103-0672	4-17-75	9.44	()	[]	(Y	(5)	[4/6]	- 10 K	
	5103-0673	4-17-15	<u> </u>	()	[]	11	[5]	(40.1	TYPINH FLOOR SCORE	
	5103-0674	4-17-95	15u5	l, I	[]	ia	C7 F	[46]	BUBLIS	
	5103-0675	NOT US	=1)	[]	{ }	[]	f:=T'	[]	NOT USED	
ype: [1] swi	pe mm ext,	[2] swipe sp	ill, [3] รษา	pe res	sv int,	[4] solid s	pill, [5]	oil res	mm, [6] water grab, [7] blank	
TCH BLOCK										
		•								
·										

 Name
 Particular
 Badge Num
 F75560
 Date
 9-72-95

 Name
 Radge Num
 173260
 Date
 9-72-95

 Name
 Badge Num
 173260
 Date
 9-72-95

 Date
 172-95
 Date
 9-72-95



FACILITY AND PRODUCTION EQUIPMENT FIRST FLOOR

5103 SERIES SAMPLE H'S